

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. Cancelled.

2. (Currently Amended) ~~The~~An electronic control unit ~~according to claim 1,~~
~~further~~ comprising:

a non-volatile memory, which allows electrical updating of data with a limitation in the number of times of data entry, for continuously storing continuous storage object data required to be stored continuously even when electrical power supply is stopped, wherein the continuous storage object data is increased or decreased in its value depending on a specified rule and is changed in its value by a positive number N at a maximum during a single operation period from power on to power off;

a control means for executing, on finding that the value of the continuous storage object data is changed in its value by N during the single operation period, a write process to write the continuous storage object data thus changed in its value by N to the non-volatile memory, and for not executing the process to write thereafter the continuous storage object data which has been changed in its value only by N to the non-volatile memory during the same operation period; and

a standby RAM supplied with an electric power for a continuous storage of data,

wherein the control means includes a periodical storage means for periodically storing the continuous storage object data to the standby RAM during the operation period until at least the data is entered to the non-volatile memory with the write process, and

wherein the control means further includes a preliminary write implementation means for writing the continuous storage object data, not yet entered to the non-volatile memory with the write process during a preceding operation period, to the non-volatile memory from the standby RAM when an electric power supply is turned on.

3. (Original) The electronic control unit according to claim 2, wherein the control means further includes a determination means for determining whether the data in the standby RAM is normal when the electric power supply is turned on, and for inhibiting the operation of the preliminary write implementation means when the data is determined to be abnormal.

4. (Currently Amended) ~~The~~An electronic control unit according to claim 1, a non-volatile memory, which allows electrical updating of data with a limitation in the number of times of data entry, for continuously storing continuous storage object data required to be stored continuously even when electrical power supply is stopped, wherein the continuous storage object data is increased or decreased in its value depending on a specified rule and is changed in its value by a positive number N at a maximum during a single operation period from power on to power off;

a control means for executing, on finding that the value of the continuous storage object data is changed in its value by N during the single operation period, a write process to write the continuous storage object data thus changed in its value by N to the non-volatile memory, and for not executing the process to write thereafter the continuous storage object data which has been changed in its value only by N to the non-volatile memory during the same operation period; and wherein:

the electric power supply is made when a power supply switch is turned on or when a switching means provided externally is turned on for a power supply;

the control means continues, when powered on and starts its operations, the operations even after the power supply switch is turned off by turning on the switching means for the power supply; and

the control means enters the continuous storage object data to the non-volatile memory and thereafter turns off the switching means, if the continuous storage object data which has been changed in its value only by N but is not yet entered to the non-volatile memory during the present operation period exists when the power supply switch is turned off.

5. (Currently Amended) ~~The~~An electronic control unit according to claim 1, ~~a~~
non-volatile memory, which allows electrical updating of data with a limitation in the
number of times of data entry, for continuously storing continuous storage object data

required to be stored continuously even when electrical power supply is stopped, wherein the continuous storage object data is increased or decreased in its value depending on a specified rule and is changed in its value by a positive number N at a maximum during a single operation period from power on to power off;

a control means for executing, on finding that the value of the continuous storage object data is changed in its value by N during the single operation period, a write process to write the continuous storage object data thus changed in its value by N to the non-volatile memory, and for not executing the process to write thereafter the continuous storage object data which has been changed in its value only by N to the non-volatile memory during the same operation period; and wherein:

the electric power is supplied when the power supply switch is turned on or when a switching means for a power supply provided externally is turned on;

the control means continues, when powered on and starts its operations, the operations even after the power supply switch is turned off by turning on the switching means for the power supply; and

when the power supply switch is turned off, the continuous storage object data which is not yet entered to the non-volatile memory with the write process during the present operation period is entered to the non-volatile memory, and thereafter the switching means is turned off.

6. (Original) The electronic control unit according to claim 4, wherein:

the control means is provided to control an engine of a vehicle; and

the power supply switch is an ignition switch of the vehicle.

7-15. Cancelled.

16. (New) An electronic control unit comprising:

a non-volatile memory, which allows electrical updating of data with an effective limitation in the number of times data entry can be effected, for continuously storing continuous storage object data required to be stored continuously even when an electrical power supply to the memory is stopped, wherein the continuous storage object data is increased or decreased in its value depending on a specified rule and is changed in its value by a positive number N at a maximum during a single operation period from power on to power off;

a RAM that is one of a normal RAM and a standby RAM; and

a control means for executing, a write process to write the continuous storage object to the RAM until the value of the continuous storage object data is changed in its value by N during the single operation period and for executing the process to write the continuous storage object data which has been changed in its value only by N and written in the RAM to the non-volatile memory during the same operation period.

17. (New) An electronic control unit as in claim 16 wherein the control means further includes a determination means for determining whether the data in the standby RAM is normal when the electric power supply is turned on, and for inhibiting the operation of the preliminary write implementation means when the data is determined to be abnormal.

18. (New) An electronic control unit as in claim 16 wherein:

the electric power supply is made when a power supply switch is turned on or when a switching means provided externally is turned on for a power supply;

the control means continues, when powered on and starts its operations, the operations even after the power supply switch is turned off by turning on the switching means for the power supply; and

the control means enters the continuous storage object data to the non-volatile memory and thereafter turns off the switching means, if the continuous storage object data which has been changed in its value only by N but is not yet entered to the non-volatile memory during the present operation period exists when the power supply switch is turned off.

19. (New) An electronic control unit as in claim 16 wherein:

the electric power is supplied when the power supply switch is turned on or when a switching means for a power supply provided externally is turned on;

the control means continues, when powered on and starts its operation, the operations even after the power supply switch is turned off by turning on the switching means for the power supply; and

when the power supply switch is turned off, the continuous storage object data which is not yet entered to the non-volatile memory with the write process during the present operation period is entered to the non-volatile memory, and thereafter the switching means is turned off.

20. (New) An electronic control unit as in claim 18 wherein:

the control means is provided to control an engine of a vehicle; and

the power supply switch is an ignition switch of the vehicle.

21. (New) An electronic control unit as in claim 16 wherein said RAM is a standby RAM.